

SAMPLE PRODUCTION COSTS

PEAR PRODUCTION, PLACER COUNTY 1976

BARTLETT PEARS continue to be a 1000 acre industry for Placer County. Fresh shipments of about 1/2 the crop, and cannery contracts for the balance brought \$894,000 gross income in 1974. HARDY and WINTER NELIS are similar in production costs but bring lower prices and in years of heavy crop, may have no market.

Marketing: through local fruit sheds, about 50% shipped fresh, 50% to canneries, a growing tonnage at farm roadside stands.

ORIENTAL SALAD PEARS are a specialty crop in small plantings, as are Early Bartletts {Dr. Jules Guyot}. Both are very susceptible to Bacterial Fire Blight. All the above mentioned varieties are now considered desirable for crosspollination of Bartletts to increase crop in years when bloom period is cold or wet. Pollinating varieties that bloom at the same time as Bartlett are grafted or planted about every fourth tree every fourth row.

To rehabilitate Bartlett pear blocks and increase yield per acre so as to obtain gross income above costs, a practice of "double planting in the rows" is recommended. Decline trees, Grade No. 3 or worse, with little or no new growth should be replaced, and in addition, new trees are placed between trees, resulting in 10'x20' spacing.

Double planting does not increase cost of operation per acre except cost of the new trees, planting, and annual pruning cost.

Test plots indicate desirable rootstocks are Calleryana, Winter Nelis, Bartlett self-rooted, Betulaefolia. Mature trees on Calleryana roots at Auburn survived pear decline better and are larger than adjacent trees with domestic french roots.

Irrigation by sprinklers, 1/8" nozzles, 1 1/2 hour sets, repeated at 12 to 20 day intervals, is most common. Interval {tensiometers helpful} depends on soil depth, day length and high temperature, July water management being most critical for these reasons and for optimum fruit sizing.

Strip weed sprays in tree rows reduce root competition and total number of times crossing rows with tractor equipment.

Fertilization at 100 pounds N per acre is recommended for January or February application in mature orchards.

All labor {except harvest} in this study is considered to be hired at \$2.85 for unskilled labor and \$3.45 per hour for tractor, truck drivers and supervisory labor, including Social Security, etc. Rent should be charged for on-farm housing.

The cost of production of one acre of trees used in this cost study for Placer County's existing orchards represents about 30% of the statewide figure of developing a new orchard 5 years of age. Also about 20% of the trees are missing or non-bearing replants.

COSTS TO PRODUCE BARTLETT PEARS IN PLACER COUNTY 1976

Production Data: 40 acres, trees spaced 20'x20'. Yield: 8-15 tons/acre.
Yield of 10 tons used for this study. Price about \$250/
ton. Labor \$2.85 & \$3.45 including fringe benefits.

Operation	Hours Per Acre	Cash and Labor Cost per Acre				Total
		Labor	Fuel & Repairs	Materials Kind & Quantity	Cost	
CULTURAL COSTS:						
Prune 30 min./tree	62.5	\$178.15				\$178.15
Brush removal	2.0	6.90	2.60			9.50
Fertilize	0.5	1.75	1.30	100 lbs. N at 30¢	30.00	33.05
Spray 8X	8.0	27.60	36.40	Spray	108.00	172.00
Dust 3X	1.2	4.15	2.75	3X at 25 lbs. 20-80	15.00	21.90
Cultivation:						
Disk 2X, mow 4X	4.0	13.80	12.00			25.80
Irrigate 11X	16.0	45.60		Water: 1/2 min. in./acre	21.00	66.60
Prop, wire or tie	6.0	17.10	12.00			29.10
Misc. labor, materials, etc.	3.00		1.00		2.00	6.00
Interest on operating capital					24.40	24.40
TOTAL CULTURAL COSTS		\$298.05	\$68.05		\$200.40	\$566.50

HARVEST COSTS:						
Pick, haul and supervise	10 tons at \$20 per ton				\$200.00	
TOTAL HARVEST COSTS						\$200.00

CASH OVERHEAD:						
Misc., office, etc.					\$ 45.95	
Taxes					40.00	
TOTAL CASH OVERHEAD						\$ 85.95

TOTAL CASH COST		\$298.05	\$68.05		\$486.35	\$852.45
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MANAGEMENT	5% of 10 tons at \$250					\$125.00
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INVESTMENT:	Per Acre	Annual Cost		
		Depreciation	Interest 8%	
Land	\$1000	\$	\$ 80.00	
Trees	1500	50.00	60.00	
Irrigation system	460	30.65	18.40	
Buildings, labor house	200	10.00	8.00	
Equipment & tractor	642	64.15	25.65	
Drainage	50	1.70	2.00	
TOTAL	\$3852	\$156.50	\$194.05	\$350.55

TOTAL COST PER ACRE						\$1328.00
Cost per ton at 10 ton yield						\$ 133.00

Yield in tons per acre	8	10	15
Total cost per ton	\$ 158	\$ 133	\$ 99
Total cost per acre	\$1263	\$1328	\$1490
Gross income at \$250/ton	\$2000	\$2500	\$3750

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EQUIPMENT INVESTMENT
FOR BARTLETT PEARS PRODUCTION

<u>Item</u>	<u>Cost</u>	<u>Operation Cost per Hour</u>
Tractor, 50 hp WD	\$11,200	\$2.10
Disk	2,000	.90
Mower	1,100	.75
Sprayer, PTO 500 gal.	4,000	3.25
Fertilizer spreader	500	.50
Ladders, props	12	12.00/acre
Duster	750	.20
Pickup	5,000	
Rake	1,100	.45
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TOTAL INVESTMENT	\$25,662	
Per acre on 40 acres	\$ 641.55	
Depreciation per acre	\$ 64.15	
Interest per acre	\$ 25.65	

